

Chair's Corner



2018 has officially begun to wrap up. We have had an eventful and successful year! We wish you, your friends, and your family a safe and joyful holiday season. It has been an honor to serve as the Chair for our vibrant local section. I look forward to supporting Paul Beaumont as he takes the seat in January. Hopefully we'll see you at the Holiday Awards Dinner Meeting!

I would like to introduce our newly appointed ACS-SR Environmental Improvement Chair, Anthony Thompson.

2018 HOLIDAY AWARDS DINNER MEETING

Friday, December 7th @ 6 pm

HOUNDSLAKE CC
901 HOUNDSLAKE DR
AIKEN, SC

\$25/person

Includes:

Dinner Buffet + 1 Drink Ticket
[2 Tickets for ACS Members],
cash bar, dessert, & 1 ornament

Music, prizes, games,
quizzes, and a photo booth

This is a time to celebrate!
Bring your significant other,
friend, coworker and enjoy
this holiday event.

**Everyone takes home a
Chemist-TREE ornament**

Business Casual

[www.acs-sr.org/
upcoming-events](http://www.acs-sr.org/upcoming-events)

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Year of the Periodic Table – 2019

The **United Nations (UN)** General Assembly 72nd Session has proclaimed **2019** as the **International Year of the Periodic Table of Chemical Elements (IYPT 2019)**. Coinciding with the celebration is the 150th anniversary of the discovery of the Periodic System by Dmitri Mendeleev (1869). For more information visit: iupac.org/united-nations-proclaims-international-year-periodic-table-chemical-elements/. The local section will incorporate this celebratory theme in our upcoming 2019 local section ventures and will host as special event at the Ruth Patrick Science Museum bringing back to life our very own Living Periodic Table.

If you have anything you would like to add or to highlight this upcoming year, please let us know!
ACSSavannahRiver@gmail.com

NHCL Pu-238

ON NOVEMBER 1ST guests visited the SRS (Savannah River Site) Heritage Museum in Aiken, SC, to witness the dedication of the National Historic Chemical Landmark Pu-238. Several guests of honor included Peter Dorhout (ACS National President, Vahid Majidi (SRNL Director), and Rick Osbon (Aiken Mayor). Guests enjoyed the impressive dinner catered by Silver Palm Catering Co. while hosts, Elise Fox and Tad Whiteside, provided a brief history outlining the relevance of Pu-238 to the CSRA and the incredible level of effort and time required to finalize and finish the landmark registry. Check out the statue in person at the SRS Heritage Museum. It is a site to remember in addition to the museum itself. 224 Laurens St, SW, Aiken, SC.



Fermentation Chemistry

ON NOVEMBER 2ND Savannah Rivers local section members and SERMACS attendees spent an evening at the Savannah River Brewing Company. Guests enjoyed a fun-filled night touring the brewery, playing games, eating light hors d'oeuvres and trying the local beer.



SERMACS 2018

OCTOBER 31ST – NOVEMBER 3RD the Savannah River local section hosted the 2018 ACS Regional Meeting SERMACS at the Augusta Marriott Convention Center. The meeting had an incredible turnout and was an event to remember! Thank you to all who helped!



ACS Local Section
Savannah River



Upcoming ACS Meetings

257th National Meeting & Exposition:

Chemistry for New Frontiers

Orlando, FL

March 31 - April 4, 2019

258th National Meeting & Exposition:

Chemistry of Water

San Diego, CA

August 25-29, 2019

Southeastern Regional

SERMACS 2019

Savannah, GA

October 20 -23, 2019



Upcoming Webinars

REGISTER HERE:

www.acs.org/content/acs/en/acs-webinars.html



Predicting the Biggest Chemistry Advances of 2019

Thurs., Nov. 29th @ 2PM EST

Join Hadi Valadi of the University of Gothenburg in Sweden as he discusses what is known about exosomes, which are the Nano-sized vesicles that allow cells to send RNA-messages to each other and have the potential to treat or cure diseases.



Predicting the Biggest Chemistry Advances of 2019

Thurs., Dec. 4th @ 1PM EST

Join Chemical & Engineering News for a recap of the most exciting research trends in chemistry that have graced its pages during the 12-month prior as well as a look at what the top trends in 2019 might be.

Adopt-A-Highway

ON NOVEMBER 10TH members of the ACS-SR, and some new faces, met for the final Whiskey Road Clean-up for 2018 (4 of 4). Approximately 16 bags of trash were picked up, 4 more than last quarter and an influx of candy wrappers along the way. This year, ACS-SR Adopt-a-Highway program collected a total of 76 bags of trash and donated approximately 38 man-hours of work. Thank you to all the volunteers who helped make this happen!



La Semana Química

NOVEMBER 10TH photos from the ever exciting annual La Semana Química where kids get together and get to enjoy chemistry!



Founders Award

63rd Annual Radiobioassay & Radiochemical Measurements Conference

FOUNDERS AWARD RECIPIENT

- David Fauth

Our very own ACS-SR Member

[Founders Award Recipients](#)

This award has a long history of presenting awards to meritorious service to the Bioassay Conference.

Recipients of this award have been recognized for their pursued professional excellence and soulful cogitation at the conference.

Please send your congratulations!

ACS-SR WOULD LIKE TO RECOGNIZE OUR MEMBERS OF 50, 60, AND EVEN 70+ YEARS!

What an incredible achievement and contribution these members have made to the society and the field of chemistry over their careers.

We would like to thank each member for their service, contribution, and for the exemplary model they bestow for those to follow.

50+ Year Members

- Mr. Harry Harmon • Dr. Kenneth Hofstetter
- Mr. Fred Hoffman • Mr. William Martin
- Mr. David Lobb • Dr. John Stone

60+ Year Members

- Dr. Herman Holcomb • Dr. John Porter
- Mr. William Jacobsen • Dr. Brian Pengilly

70+ Year Members

- Dr. Victor Reilly • Dr. Benjamin Rouse

SERMACS 2018 AWARD WINNERS

E. Ann Nalley Regional Award for Volunteer Service to ACS

- Dr. Maurice E. Snook

Northeast Georgia Local Section

Stanley C. Israel

- Dr. Rigoberto Hernandez

John Hopkins University

Regional Awards for Excellence in High School Teaching

- Dr. Romina M. Jannotti

Paul J. Hagerty High School
Oviedo, Florida

Travel Grant Winners

- Madison Bardot
- Griffin Barnes
- Jake Boyar
- Alvaro Calderon
- Mina Chanakira
- Phuong Chau
- Runiya Dasgupta
- Jabbarius Ervin
- Brittany Lee
- KY-Mani Miller
- Courtney Parks
- Kenyanna Parrish
- Kathryn Segner
- Rabia Sheikh
- Jacob Shumate
- Ronald Smith
- Sheila Tran
- Melissa Velazquez-Rodriguez
- John Tyler Wagner
- Noah Wallace



ACS Local Section
Savannah River



Our NEW 2019 Elected Officials

Chair-Elect
Dr. Kaitlin Lawrence



Treasurer
Dr. Lewis Baylor



Secretary
Dr. Michael DeVore II



Current ACS-SR Officers
www.acs-sr.org/our-team

Current YCC Officers
www.acs-sr.org/about-us

Congratulations
Hitesh Honkanadavar

2018
ACS-SR
Local Section
Travel Grant Award
Recipient

Awards and Nomination Opportunities

3

Denise L. Creech Award (Teachers)

www.acs-sr.org/teacher-nominations

Nominate a great CSRA high school chemistry teacher!

- Teacher receives award plaque and \$500
- School receives \$500 for new lab supplies

ACS-SR Student Travel Grant (Students)

www.acs-sr.org/teacher-nominations

Apply for a travel grant to an ACS meeting.

- Reimbursement up to \$500

Chemistry Teachers

Educational resources available for elementary through graduate school, workshops and webinars, alternative high school teacher certification, and scholarships, grants, & awards

<https://www.acs.org/content/acs/en/education/educators.html>

- AACT (American Association for Chemistry Teachers): K-12 Chemistry Resources
<https://teachchemistry.org/classroom-resources/safety>
- Professional Development Grants for High School Chemistry Teachers: **Due Jan. 4th**
<https://www.acs.org/content/acs/en/funding-and-awards/hachprograms/acs-hach-professional-development-grant.html>

Graduate Students & Post doctorate Scholars

Support including career planning, networking, awards & fellowships, mentoring, and professional development.

www.acs.org/content/acs/en/education/students/graduate.html

Undergraduate Chemistry Students

Support including internship, scholarship, and award opportunities, abstract writing, preparation for graduate school, and career planning.

<https://www.acs.org/content/acs/en/education/students/college.html>

High School Chemistry Students

Programs and resources to include clubs, competitions, magazines, research projects (i.e. SEED), scholar programs, and college planning.

<https://www.acs.org/content/acs/en/education/students/highschool.html>

ACS National Nominations

Nominations are especially needed for the awards below.

- ACS Award: **Affordable Green Chemistry**
- ACS Award: **Creative Invention**
- ACS Award: **Encouraging Disadvantaged**
- ACS Award: **Students into Careers in the Chemical Sciences**
- Earle B Barnes Award: **Leadership in Chemical Research Management**
- Elias J. Corey Award: **Outstanding Original Contribution in Organic Synthesis by a Young Investigator**
- George C. Pimentel Award: **Chemical Education**
- James T. Grady-James H. Stack Award: **Interpreting Chemistry for the Public**
- Kathryn C. Hach Award: **Entrepreneurial Success**
- George and Christine Sosnovsky Award: **Cancer Research**
- Henry H. Storch Award: **Energy Chemistry**

Submit: www.nominate.acs.org

Visit www.acs.org/nationalawards for more information about submission of nominations and required documents.

Online and Short Courses available to ACS members at discount cost

Visit: proed.acs.org

For questions: proed@acs.org

PERIODICALLY
FUNNY NEWS

PFN1: What did one charged atom say to the other?

PFN2: Why didn't the chemist enjoy chromatography experiments?

SCIENCE
ANTIQUITY

December 2, 1942

Atomic Age began

The first artificially initiated self-sustained nuclear fission reaction was engineered by Italian scientist Enrico Fermi at the University of Chicago.

December 3, 1984

Bhopal Disaster

A leak of toxic methyl isocyanate gas at Union Carbide India pesticide plant. It caused almost 4,000 deaths and is one of the World's worst industrial catastrophes.

December 5, 1901



Werner
Heisenberg

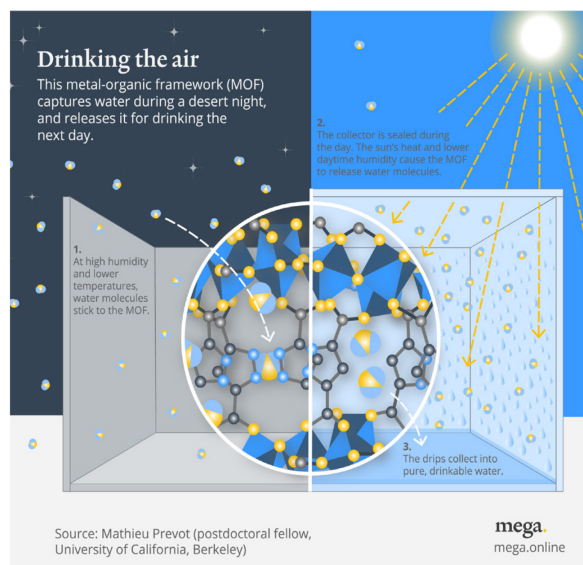
Won the Nobel Prize in Physics for his theory of quantum mechanics and its applications, resulting in the discovery of allotropic forms of hydrogen (H_2).

"A MOF the size of a sugar cube has so many pores that were they to be smoothed out they would cover an area as large as six football fields."

Metal-organic frameworks are compounds that are set to solve some tough challenges: producing water in the desert, removing greenhouse gases from the air and storing dangerous gases more safely.



University of California, Berkeley professor Omar Yaghi has been awarded with the awards to include: Prince Sultan International Water Prize, Gregori Aminoff Prize by the Royal Swedish Academy of Sciences, Eni Energy Award, Wolf Prize in Chemistry, Kuwait Prize in Basic Sciences, 2017 Japan Society of Coordination Chemistry International Award, 2017 Albert Einstein World Award of Science, highest honor by Jordanian King, 2017 Royal Society of Chemistry Spiers Award, Bailar Medal, Turkey's highest scientific honors from president Erdogan, Turkish Academy of Sciences basic science prize, Nanoscience and Nanotechnology international prize, and many other awards preceding. One of his recent developments is metal-organic frameworks (MOF), referred to by Scientific American as a "material to save the world".



Scientific American Article

<https://www.scientificamerican.com/custom-media/pictet/a-material-to-save-the-world/>

JACS Publication (Storage of H_2 , CH_4 , and CO_2)

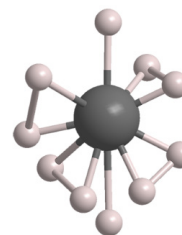
<https://pubs.acs.org/doi/pdfplus/10.1021/ja9015765>

Yaghi Awards: <http://yaghi.berkeley.edu/news.html>



Molecule of the Week

Lanthanum decahydride set a world record this year!



Superconductivity, a substance that exhibits no electrical resistance when cooled below a certain temperature, the critical transition temperature (T_c), discovered by Dutch physicist Heike Kamerlingh Onnes in 1911.

Last month, scientists Maddury Somayazulu, Russell J. Hemley, and colleagues at George Washington University, Carnegie Institution of Washington, and Argonne National Laboratory made a compound with empirical formula LaH_{10} that exhibited a "hot" T_c of $-13^\circ C$, lanthanum decahydride is stable only at the pressure at which it is formed ≈ 200 GPa or 2 million times the Earth's atmospheric pressure at sea level.

They discovered superconductivity near ambient temperature!

"Nothing in life is to be feared, it is only to be understood. Now is the time to understand more, so that we may fear less."

Marie Curie

**AIKEN, SC**

Savannah River Nuclear
Solutions

sjobs.brassring.com

- Senior Environmental Engr (Scientist, Chemical Engineer)
- FLM, Laboratory (Environmental Bioassay Laboratory)
- Entry Lab Tech 4022BR (17 positions)

Atkins

www.linkedin.com/jobs/view/917977654

- Lab Technician

N. AUGUSTA, SC

Ambiopharm

www.ambiopharm.com/

- Quality Assurance Associate III
- Quality Control Chemist II

AUGUSTA, GA

DSM

www.linkedin.com/jobs/view/945836583

- Lab Technician 3

Southern Company
(Plant Vogtle 1&2)

www.linkedin.com/jobs/view/964731489

- Chemistry Supervisor

Georgia Military College

www.linkedin.com/jobs/view/796512030

- Adjunct Professor:
Chemistry (847-094)

The CSRA Chemist

Our newsletter is published ten times per year by the Savannah River Section of the American Chemical Society.

Opinions expressed by the editor or contributors do not necessarily reflect the official position of the Section.

Mailing Address

Savannah River Section –
American Chemical Society
c/o Mr. Brent Peters
Savannah River National Laboratory
Building 999-2W
Aiken, SC 29808

All newsletter articles should be submitted by e-mail to brent.peters@srnl.doe.gov

Meeting Announcements:

The CSRA Chemist will announce scientific meetings of interest to chemists and chemical engineers (when space is available).

For information and deadlines, contact Brent Peters or visit our website.

www.acs-sr.org

Change of Address (ACS National):

On the web at www.acs.org; by phone at 800-333-9511; by email: service@acs.org.

The Local Section receives roster updates monthly from ACS National.

Local Section **Chem**unication Information
Below:

#ACSSavannahRiver

ACS - Savannah River

Local Section

Executive Committee – 2018**Chair**

Ms. Ashlee R. Swindle (803) 725-6819

Chair-Elect/Program Chair

Dr. Paul Beaumont (803) 645-7639

Immediate Past-Chair

Dr. Maria Kriz (803) 725-9454

Secretary

Dr. Matthew Wellons (803) 725-0412

Treasurer

Dr. Lewis Baylor (706) 364-6919

Councilor

Dr. Chris Bannochie (803) 725-8088

Alternate Councilor

Dr. Katie Heroux (803) 514-0472

Hospitality & Elections

Dr. Maria Kriz (803) 725-9454

Membership

Dr. Kathryn Taylor-Pashow (803) 725-8215

Projects Coordinator

Ms. Linda Youmans (803) 952-7885

Public Relations

Mr. Brent Peters (803) 646-9426

YCC Co-Chair

Dr. Thanh-Tam Truong (803) 646-4998

YCC Co-Chair

Dr. Kaitlin Lawrence (803) 514-0272

Publications Editor

Mr. Brent Peters (803) 646-9426

Website Editor

Ms. Ashlee Swindle (803) 725-6819

2019 DENISE CREECH AWARD

Outstanding High School Chemistry Teacher Award

The Savannah River Section of the American Chemical Society (encompassing Aiken, Barnwell, Edgefield, McCormick, Columbia, Richmond, Burke, Emanuel, Jenkins, and Screven Counties) is currently accepting nominations for the 2018 Denise L. Creech Outstanding High School Chemistry Teacher Award. This award includes a \$500 gift to the teacher and a \$250 grant for laboratory supplies to the school.

The Denise L. Creech Outstanding High School Chemistry Teacher Award, given out by the Savannah River local section, is named in honor of Denise L. Creech, an outstanding South Carolina high school chemistry teacher, who has since moved on to a position at the American Chemical Society's headquarters in Washington, D.C. Please help us encourage and support high school chemistry education by passing this notice on to appropriate teachers and/or students.

If you wish to nominate someone or yourself, please complete the nomination form below or contact Ashlee Swindle (Ashlee.Swindle@srnl.doe.gov) for more information. This award has an open nomination period and a winner will be selected in December 2019. Nominees not selected this year will remain under consideration for the award for 3 years.

Nominee Information:

Nominee Name:	<input type="text"/>		
Present Position (Exact Title):	<input type="text"/>		
School:	<input type="text"/>		
City:	<input type="text"/>	State:	<input type="text"/>
Telephone:	<input type="text"/>		
E-mail:	<input type="text"/>		
Website (optional):	<input type="text"/>		
Nominator Information (can be self):	<input type="text"/>		
Nominator Name:	<input type="text"/>		
City:	<input type="text"/>	State:	<input type="text"/>

Please supply the following information on the Nominee, separate pages may be used:

1. Teaching experience, including years and location, chemistry courses taught; other teaching experience/courses taught.
2. Description of nominee's qualification for the award and reasons for nominating.
3. Educational background (encouraged but not required).
4. Provide the names and contact information of at least 2 references (colleagues, former students, etc.) that we may contact.

Please send completed forms by **November 4, 2019** to
Ashlee.Swindle@srnl.doe.gov



The Savannah River Section of the American Chemical Society will be giving a \$500 travel grant to an undergraduate student attending an ACS Conference/Meeting by the deadline October 7, 2019.

Winners will be chosen based on the information provided and will be given \$500 after attending an ACS Conference/Meeting. Preference will be given to student presenters.

Undergraduate students interested in applying must fill out the form below.

Applicant's Name: _____ E-mail: _____

School Attending: _____

Degree Seeking: _____ Grade Level during conference: _____

Expected Graduation Date: _____

Meeting Attending: _____ Dates: _____

Advising Professor: _____ E-mail: _____

Conference Role (Presenter/Observer): _____

Abstract Title (if presenting): _____

State the reason for attending as well as what you hope to gain by attending the meeting:

Are you an ACS member? _____ Have you previously attended an ACS meeting? _____

Have you been active in or attended events sponsored by the ACS-SR? _____

Have you received any other travel grants for this meeting's attendance? _____

Have you previously attended an ACS meeting? _____

Next Deadline: October 7, 2019

Please e-mail applications to ACSSavannahRiver@gmail.com.

Contact Paul Beaumont with additional questions.

Email: Paul.Beaumont@srnl.doe.gov

Phone: 803-645-7639



ACS Local Section
Savannah River



Invites you to join us at the

Annual Holiday Dinner Meeting

Friday, Dec. 7th at 6 pm

Houndslake Country Club

Dinner Buffet + 1 Drink Ticket
ACS Members receive 2 Tickets

901 Houndslake Dr.
Aiken, SC

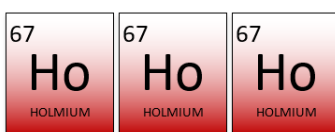
\$25/person

*Each guest will take
home a science
themed tree
ornament*

*Dinner
Music
Cash Bar
Trivia
Challenges
Prizes
Photo Station*



Bring your spouse, significant other, friend, or co-worker and enjoy a festive and exciting evening at the ACS-SR holiday dinner meeting.



RSVP: www.acs-sr.org/upcoming-events

Host: Paul.Beaumont@srnl.doe.gov